

Chapter 29 CONSERVATION AND ENERGY EFFICIENCY PROGRAMS

Rule 29

100 Purpose

The Commission has developed these rules to implement energy efficiency programs and standards in Mississippi. The rules apply both to electric and natural gas service providers subject to the jurisdiction of the Mississippi Public Service Commission. The rules define “Quick Start” to encourage the early implementation of energy efficiency programs and to provide experience on which Mississippi’s service providers and the Commission can build Comprehensive Portfolios – long-term energy efficiency programs. The rules also define the elements of Comprehensive Portfolios.

101 Definitions

1. Administrator – The entity, which may be the service provider, responsible for creating and managing an energy efficiency program or portfolio.
2. Best Practice – An approach that experience indicates is more effective at delivering a particular outcome (*e.g.*, program design, implementation efficiency, cost effectiveness, EM&V) than other approaches. For the purpose of this rule, Best Practices are energy efficiency programs, measures, EM&V, and deemed savings successfully implemented in other jurisdictions and adapted for any economic, social, or demographic characteristics unique to Mississippi. Best Practices are identified by the National Action Plan for Energy Efficiency (NAPEE), by similar national organizations, and by utilities with significant long-term energy efficiency experience.
3. Comprehensive Portfolio – A collection of energy efficiency programs that, when taken together, provide appropriate organizational resources including financial, technical, outreach, marketing, service provider infrastructure, training, and education support sufficient to achieve widespread implementation of all types of significant cost-effective energy-efficiency improvements in all categories of retail customers.
4. Cost-effective – A standard used to describe a net-beneficial result for programs to be implemented, determined through a process that includes a review of relevant cost-benefit tests. A Cost-effective program would be one that can provide aggregate ratepayer benefits for a majority of utility customers.
5. Deemed Savings – Pre-determined, validated estimates of energy and/or demand savings attributable to particular energy efficiency measures, based upon engineering calculations, baseline studies, reasonable assumptions and/or experience. Deemed savings values must be revised periodically to reflect new technologies; new federal; state or local policies and codes; and additional experience.
6. Energy Efficiency – Reducing energy input to equipment and/or processes while maintaining or improving the customer's existing level of comfort and end-use functionality. Reduction in energy input may be achieved by substituting more advanced technology or by reorganizing the process to reduce waste heat, waste cooling, or energy. Demand response is a form of energy efficiency.
7. Energy Efficiency Savings – Energy (kWh, therms) and/or capacity (kW) savings

determined by comparing measured energy use before and after implementation of an energy efficiency measure or by reference to a set of Deemed Savings approved by the Commission.

8. Evaluation, Measurement, and Verification (EM&V) – Studies and activities performed to determine the actual savings and other effects from energy efficiency programs and measures.
9. Measure – The equipment, materials and/or practices that, when put into use at a customer site, result in a measurable and verifiable reduction in either purchased energy consumption; measured energy or peak demand; or both.
10. Portfolio – The entire group of programs offered by an Administrator.
11. Program – A particular energy efficiency service or set of services directed to a particular population.
12. Program Year – The year in which programs are administered and delivered. For the purposes of planning and reporting, a Program Year shall be considered a calendar year, January 1 through December 31.
13. Quick Start – A portfolio of energy efficiency programs selected from programs that have been widely implemented in other jurisdictions and can provide aggregate ratepayer benefits to a majority of utility customers. These programs can be implemented more quickly in Mississippi because they are already well-defined, have well-established track records, and require fewer showings to the Commission.

102 Administration and Implementation of Energy Efficiency Programs

1. Filing for Commission Approvals

- a. Quick Start Plans – Each electric and natural gas utility serving more the 25,000 customers (meters) and subject to the jurisdiction of the Commission shall file with the Commission for its approval a Quick Start Plan for energy efficiency programs for its service territory. These Plans shall be filed not later than three (3) months following the order adopting this Rule. Utilities serving 25,000 customers (meters) or fewer are exempt from filing Quick Start Plans.
- b. Comprehensive Portfolio Plans – No later than 36 months from the date of the Commission's order approving its Quick Start Plan, each electric and gas utility shall file a Comprehensive Portfolio Plan of energy efficiency programs. Utilities serving 25,000 or fewer customers (meters) are not exempt from this filing and shall submit descriptions of energy efficiency programs that are economically feasible to implement for their organization's size.
- c. Approval – A program, portfolio, or plan filed under these rules shall not be implemented until a Commission order is issued expressly approving the program, portfolio, or plan. The Commission shall establish a procedural schedule for the review of each program, portfolio, or plan filing.

2. Waivers

Exemptions from these rules may be granted by the Commission in accordance with the Commission's Rules of Practice and Procedure. Nothing in these rules shall preclude the Commission from modifying these rules on its own initiative or in response to a party's motion and after notice and hearing.

103 Quick Start Plan Filing Requirements

- 1.** Service providers shall propose general program designs, specific programs, and specific measures and may propose programs and/or measures in any combination. The objective of Quick Start shall be: a) the development of increased utility program capabilities and infrastructure; b) the expansion of energy efficiency expertise throughout Mississippi; c) the identification of locally successful (and unsuccessful) energy efficiency program delivery strategies; and d) the initial delivery of energy savings benefits to a sizable cross section of utility customers.

Quick Start Plans shall include energy efficiency programs designed to cover the partial year remaining from the date of the Commission's order approving the Plan plus two successive full Program Years. Quick Start Plans may also include additional programs to be implemented in the first and/or second full Program Year. Quick Start Plans shall include energy efficiency programs that address all customer classes.

2. Energy Efficiency Programs in Quick Start

Energy efficiency programs should be capable of being implemented within four months of Plan approval.

All Quick Start programs shall be based on technologies that are commercially available. As appropriate, Quick Start programs shall be coordinated with and not duplicate related programs funded through other sources.

Programs filed by natural gas and electric utilities shall comply with the standards and rules regarding promotional practices as set forth by Commission Order in Docket 1994-UA-115.

Quick Start budgets shall be applied to programs of sufficient scale to provide meaningful energy and/or demand reductions for the applicable program time periods rather than to a larger number of smaller programs with minimal impacts.

Utilities shall file energy efficiency programs developing individual programs from the following general list of categories:

- a.** *Customer Education* – This would include the education of customers on energy efficiency and conservation. It should, to the greatest extent possible, be a consistent statewide group of messages. It should include education of builders and equipment installers. The messages should encourage the efficient use of electricity and gas. The messages should increase awareness of opportunities to use electricity and natural gas more efficiently. This category of programs would apply to all customer classes.
- b.** *Energy Audits and Evaluations Leading to Savings* – This would include home and commercial energy audits and audits of commercial and industrial processes and equipment. The audits and evaluations would produce recommendations for opportunities to implement site-specific efficiency and conservation measures. Programs would be designed for audits to lead to savings results and could

include cost-effective and economically justified customer incentives to encourage the implementation of site-specific measures. A training component to increase the number and quality of auditors may be needed. This category of programs would apply to all customer classes.

- c. *Inspection and Tune Up of Heating and Air Conditioning Systems* – This would be applicable to residential, commercial, and industrial systems. This category of programs would apply to all customer classes.
- d. *Lighting* – Improved lighting for residential, commercial, and industrial customers. This category of programs would apply to all customer classes.
- e. *Appliances* – Programs that offer rebates or other incentives on high-efficiency appliance and work with upstream trade allies to increase the sales of these products through the distribution chain. This category of programs most often applies to residential and small commercial customers.
- f. *Increased Deployment of Demand Response Programs* – Such programs already exist in Mississippi. This would look for additional opportunities to offer demand response programs including interruptible service, curtailment service, off-peak service, etc. In the near term, this category of programs would apply to commercial and industrial customer classes but may eventually extend to residential customers.
- g. *Weatherization and Whole-Home Retrofits* – A residential weatherization or comprehensive retrofit program that would be based solely on efficiency criteria using established home assessment protocols and often targeting least efficient homes first. This category of programs would apply to the residential customer class.
- h. *New Homes Program* – These residential programs provide incentives to builders who achieve a percentage of energy savings against a prescribed standard.
- i. *Commercial and Industrial Prescriptive Incentive Programs* – These programs offer a fixed-dollar incentive for multiple defined prescriptive measures (i.e., lighting, HVAC replacements, occupancy sensors, motors, etc.).
- j. *Commercial and Industrial Custom Incentive Programs* – In these programs the Administrator works with the customer to develop site-specific energy efficiency measures, and the incentive is based both on the amount of energy saved the total cost of the energy efficiency measures.
- k. *Commercial and Industrial Retro-Commissioning* – Existing buildings and comprehensively assessed and “tuned up” to optimize energy efficiency in their operations.

3. Quick Start Plan Portfolio Description

Each Quick Start Plan filing shall address the following portfolio elements:

- a. Demonstration that the portfolio of Quick Start programs serves all customer classes;
- b. A Quick Start budget and cost recovery proposal to be collected in an energy efficiency rider (see Section 106); and
- c. Any additional supporting information the Administrator may propose.

Although estimates of program costs must be included in proposals, Quick Start programs are exempt from the requirement to provide cost-effectiveness showings under the cost-benefit tests of Section 105. Estimated energy and demand savings and

an EM&V program shall be included for all Quick Start programs except a statewide education program.

4. Quick Start Plan Individual Program Descriptions

Each program in the Quick Start Plan should include the following general information:

- a. A general description of the program and the services to be provided;
- b. The target customer population addressed by the program;
- c. The specific program objectives;
- d. The identification of the specific EM&V procedures that will be implemented to determine whether the program has achieved its stated objectives;
- e. Anticipated implementation barriers and how they will be addressed;
- f. Any proposed customer incentives;
- g. Program's timeframe if the program term is limited;
- h. A plan for addressing over-subscription to the program and avoiding disruptive stop-start funding cycles;
- i. Estimated energy and peak demand savings and the basis for these savings estimates, which may use Deemed Savings;
- j. Estimated program costs and its proportion of the Quick Start budget; and
- k. Any additional information or analyses the service provider may propose.

104 Comprehensive Portfolio Plan Filing Requirements

1. Service providers shall propose general program designs, specific programs, and specific measures and may propose programs and/or measures in any combination. All programs (design, implementation, EM&V, etc.) shall be guided by Best Practices. As appropriate, Comprehensive Portfolio programs should be coordinated with and not duplicate related programs funded through other sources.

The Comprehensive Portfolio Plan shall include energy efficiency programs that address all customer classes. Plans shall cover at least one year and may cover up to three years.

Except for pilot or trial programs, Comprehensive Portfolio budgets should be applied to programs of sufficient scale to provide meaningful energy and/or demand reductions for the applicable program time periods instead of to a larger number of smaller programs with minimal impacts. Except for pilot or trial programs, technologies supporting energy efficiency programs should be commercially available. Program cost allocations should follow cost-causation principles – there shall be no cross subsidization between customer classes.

2. Comprehensive Portfolio Description and Support

Program plans shall consist with and reflect the effects of all energy efficiency programs in the electric utilities resource plans or natural gas utilities procurement plans.

Programs filed by natural gas and electric utilities shall comply with the standards and rules regarding promotional practices as set forth by Commission Order in Docket 1994-UA-115.

Each Comprehensive Portfolio Plan filing shall address the following portfolio-level elements:

- a. Demonstration that the scope of the Comprehensive Portfolio Plan serves all customer classes;
- b. A showing of providing aggregate ratepayer benefits to the majority of ratepayers;
- c. Cost-benefit analysis (see Section 105) listing total costs and benefits, including expected savings goals for the portfolio;
- d. A Comprehensive Portfolio budget and cost recovery proposal to be collected in an energy efficiency rider (see Section 106); and
- e. Any additional supporting information the utility may propose.

3. Comprehensive Portfolio Plan Individual Program Description Requirements

Program designs should reflect Best Practices. The proposed programs may continue to include, but are not limited to, those in Quick Start. For program implementation, a focus should be placed on local and diverse equipment and service providers to the extent these are available and competitively priced.

- a. For the Comprehensive Portfolio and each program a utility shall describe, in qualitative and quantitative terms, how its proposal will further or accomplish any or all of the following objectives or benefits that are reasonably applicable to the utility's proposal. Should the utility determine that its proposal does not address one or more of the listed objectives or benefits, the utility shall briefly explain why not.
 - i Energy savings directly attributable to program activities;
 - ii Long-term and permanent changes in behavior, attitudes, awareness, and knowledge about energy savings and use of energy efficient technologies in order to achieve energy savings;
 - iii Permanent electric peak demand reduction;
 - iv Energy cost savings and cost-effectiveness;
 - v Reliability enhancements;
 - vi Energy security benefits;
 - vii Environmental benefits;
 - viii Job creation and economic development/competitiveness benefits for Mississippi;
 - ix Increases in system-wide capacity;
 - x Improvement in energy affordability for all customers; and
 - xi Efficient program implementation.

- b. Each program in the Comprehensive Portfolio should include the following information:
- i A general description of the program and the services to be provided;
 - ii The target customer population addressed by the program;
 - iii The specific program objectives;
 - iv Targets for customer participation and energy use reductions;
 - v The identification of the specific EM&V procedures that will be implemented to determine whether the program has achieved its stated objectives. The EM&V plan should appropriately balance the need to assess and improve program performance with EM&V costs. EM&V approaches should be guided by Best Practices. Portfolio EM&V cost targets should be no more than five percent of total portfolio costs although EM&V costs for some individual programs may be higher;
 - vi Anticipated implementation barriers and how they will be addressed;
 - vii Any proposed customer incentives;
 - viii Program's timeframe if the program term is limited;
 - ix A plan for addressing over-subscription to the program and avoiding disruptive stop-start funding cycles;
 - x The prescribed cost-benefit analyses (see Section 105);
 - xi Estimated energy and peak demand savings and the basis for these savings estimate, which may include Deemed Savings if approved by the Commission;
 - xii Any additional information or analyses the service provider may propose.

4. Uniformity of Programs

Programs addressing both electric and gas customers in the same service territory shall be coordinated to the extent reasonable.

a. Customer Incentives

Programs may include financial and other incentives to encourage customers to make energy efficient investments if the incentives are cost justified and are a component of a program that can provide aggregate ratepayer benefits to the majority of utility customers.

Incentives may include information, technical assistance, leasing programs, product giveaways and direct financial inducements. Financial inducements may include but are not limited to rebates, discounted products and services, and low-rate financing.

All customer incentives shall be considered in the cost-benefit testing of programs. Costs of customer incentives shall be considered a direct program cost.

Incentives shall not be any higher than necessary to overcome the customer barriers to invest in the measure and should be reduced or eliminated as the measure becomes more of a standard practice.

b. Statewide Programs

The Commission, after notice and hearing, may direct utilities to offer uniform statewide energy efficiency and conservation programs if it determines such standardization to be the most cost-effective result and in the public interest. Utilities may request approval to offer statewide or region-wide programs for which public messages, commercial terms and conditions, and customer reception are best served by such an approach.

c. Pilot Programs

The Commission may approve pilot energy efficiency programs. A pilot program design is distinct from Quick Start and other program designs in that it shall include explicit questions that the pilot will address, explicit EM&V designed to address pilot questions, estimates of program costs and savings, and a provisional cost-benefit evaluation. Pilot Programs shall be of limited duration until reassessment after a pre-determined period. Pilot programs shall have characteristics from among the following:

- i Addressing a new end use, and
- ii Applying a new technology or a new delivery method.

Programs that are neither pilots nor Quick Start programs must comply with all of the plan filing requirements of this Section 104.

All costs for Pilot, Quick Start, and other programs shall be considered eligible for cost recovery.

105 Cost-Benefit Tests

Cost-benefit assessments for all energy efficiency programs shall be evaluated using the Total Resource Cost (TRC), the Program Administrator Cost (PAC) (also known as the Utility Cost Test (UCT)), the Participant (PCT), and the Rate Impact Measure (RIM) tests as defined in the California Standard Practices Manual: Economic Analysis of Demand Side Programs and Projects, July, 2002, ("Manual") and submitted to the Commission. The inputs for these tests shall be based as much as practicable on data local to Mississippi. The costs of program design; implementation; delivery; customer incentives; customer education and marketing; measurement of benefits; and administration are recognized parts of energy efficiency program costs that should be included in cost-benefit calculations. Cost-benefit results shall be presented for both an individual program and portfolio basis.

A utility shall use an evaluation period of either ten years (a natural gas utility may use an evaluation period of fifteen years) or the actual lives for each measure in a program to evaluate a program or portfolio.

Utilities may submit additional economic analyses information in support of a proposed program or portfolio.

Results of the tests shall be presented consistent with the descriptions shown in Table 1 or by other means approved by the Commission.

**TABLE 1 - Cost-Benefit Tests
with Primary and Secondary Means of Expressing Test Results**

Primary	Secondary
<i>Participant Test</i>	
Net present value ("NPV") (all participants)	Discounted payback (years) Benefit-cost ratio ("BCR") Net present value (average participant)
<i>Ratepayer Impact Measure (RIM) Test</i>	
Lifecycle revenue impact per unit of energy (kWh or therm) or demand customer (kW)	Lifecycle revenue impact per unit Annual revenue impact (by year, per kWh, kW, therm, or customer) First-year revenue impact (per kWh, kW, therm, or customer) BCR
Net present value	
<i>Total Resource Cost (TRC) Test</i>	
Net present value	BCR Levelized cost (cents or dollars per unit of energy or demand)
<i>Program Administrator Cost (PAC) Test</i>	
Net present value	BCR Levelized cost (cents or dollars per unit of energy or demand)

The Commission will rely on the formulas in the Manual and will assess the cost-benefit test results in the public interests.

106 Cost Recovery

Cost recovery shall be limited to the incremental costs which represent the program costs that are not already included in the then-current utility rates and shall include full and timely recovery of program costs and lost contribution to fixed cost. The Commission may decide to limit the time period during which utilities may recover lost contributions to fixed cost.

To address disincentives for energy efficiency investments, the utilities may propose an approach to earn a return on energy efficiency investments though a shared-savings or performance-incentive mechanism to make these investments more like other investments on which utilities earn a return. Prior to the Comprehensive Portfolio filing deadlines, the Commission intends to establish specific numerical energy savings targets expressed as

percentages of energy sales based on the experience of Quick Start and other relevant information.

A utility may request energy efficiency cost recovery through a rider.

A utility may request that costs from approved program budgets be included in the rider. A utility may request that cost recovery begin when the energy efficiency program is implemented and offered to customers. Utilities may also propose a mechanism to adjust budgets to deal with oversubscriptions and to avoid stop-start funding.

If a utility is recovering energy efficiency program costs through a rider, the utility shall file, contemporaneous with the Annual Report under Section 107, a re-determined Energy Efficiency Cost Rate ("EECR"). In support of this re-determined rate, the utility shall file a schedule of actual program costs for the reporting period, actual amounts collected under the rider for the reporting period, and approved program budgets for the current calendar year. The EECR shall be adjusted to reflect a reconciliation of any over- or under-recovery for the prior year and the approved budget for the current Program Year.

107 Annual Reporting Requirements

By April 1 annually, each electric and gas utility shall file an Annual Report addressing the performance of all approved energy efficiency programs. The report shall present:

1. The results of the prescribed EM&V measures for the Portfolio and each program;
2. A measure of each program's savings;
3. The amounts spent on each energy efficiency program and the total amounts spent on all programs; and
4. Any recommendations for expansion, reduction, alteration, addition, or elimination of any programs with justifications for the recommendations.

108 Records

All energy efficiency programs and measures are subject to inspection by the Commission.

All records of energy efficiency programs shall be maintained in sufficient detail to permit a thorough audit and evaluation of all program costs and program performance. This Section 108 does not limit the existing authority of the Mississippi Public Service Commission.

Source: Mississippi Code Annotated § 77-3-45.